

ABSTRACT

A method of fine synchronization to a receive signal corresponding to a reference signal transmitted in a transmission channel which includes the following steps : (i) selecting a source signal producing a characterization signal after it has passed through said transmission channel, (ii) establishing a characterization matrix for estimating the covariance of the characterization signal, (iii) identifying dominant eigenvalues which are the highest eigenvalues of the characterization matrix, (iv) calculating the correlation function of the source signal with the sum of the eigenvectors associated with the dominant eigenvalues, and (v) searching for the first maximum of the correlation function.